# Egyptian Pioneer Schools Languages

## Academic year: 2018/ 2019






# Primary 5

# Science Booklet

## Second Term

- Student Name: _______________________

- Class : _______________________

Unit 1

Lesson 1

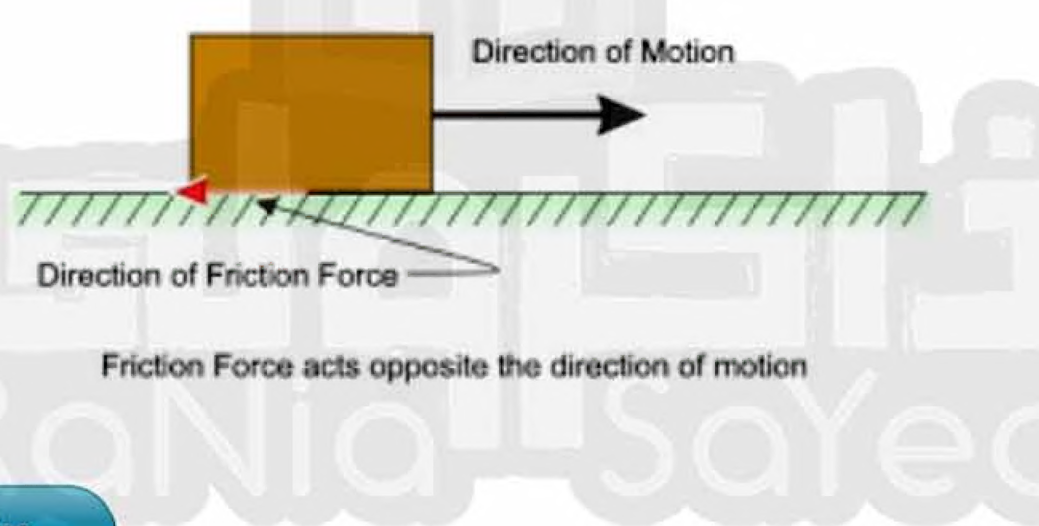
# Friction Force

## The friction force:

- It is the amount of force that exists between two surfaces and it affects the movement of objects in the opposite direction.

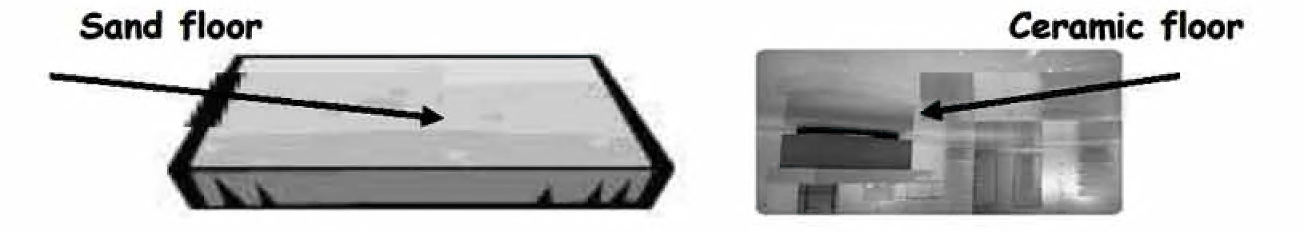
Or.

- A force that slows down the moving object and has its effect in **the opposite direction.**






### *Examples*



## When a ball moves on two different floors:

**A)** Moves on your sandy floor of the playground

↓

The ball stops moving after a short time.

**B)** Moves on the smooth floor of the classroom.

↓

The ball keeps moving for a long time.

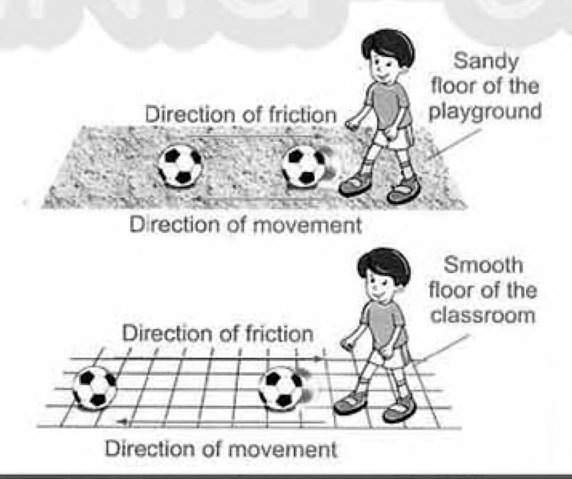
## Give reasons:

**1- The ball which moves on sandy floor stop after a little time.**

Due to the friction force which affects in the opposite direction of the movement of the ball.

**2- When you ride a bike and left your feet from the pedal the speed decrease gradually.**

Due to the friction force which slows down the bike speed.



## There are two types of friction force:

| Notes | High friction | Low friction |
|---|---|---|
| The shape | A plastic cube<br>A sloping wooden board | Direction of movement<br>Direction of friction force |
| slope | - Decrease the slope. | - Increase the slope. |
| Friction force | - The friction force is larger than the movement force. | - The friction force is smaller than the movement force. |
| Observation | - The cube doesn't move. | - The cube moves. |

▪**When the cube moves downwards**.

The direction of the friction force is upwards.

▪As the slope of the surface increases the friction force decreases.

## The factors affecting the friction force:

### 1) The surface area of the moving body.(Direct relation)

| The surface area | The friction force |
|---|---|
| Increase | Increase |
| Decrease | Decrease |

2) The type of the material surface.

| The type of the material surface. | The friction force |
|---|---|
| Rough | Increase |
| Smooth | Decrease |

3) The speed of the body. (Direct relation)

| The speed of the body | The friction force |
|---|---|
| Increase | Increase |
| Decrease | Decrease |

***Give reasons:***

1- **There's a direct relation between the surface area of the moving object and the friction force.**

Because by increasing the surface area, the friction force increases and vice versa.

2- **The ball moves on the classroom floor for a longer distance than on the playground.**

Because the friction force is higher in case of the rough surfaces **(Playground)** than in case of the smooth surfaces **(Classroom)**.

## Types of friction

### 1-Friction between a solid obiect and air.

- When a solid object moves in air, a friction force arises between the object and air.
- This type of friction is called "air resistance" and it acts in the opposite direction of the body movement.

## Air resistance:

- It is the friction force resulting from the movement of solid objects through air.

## The factors affecting air resistance:

**1-The speed (velocity) of the body.**

- By **increasing** the **speed** of the body that moves through air, **air resistance increases.**

**2-The surface area of the body.**

- **By increasing the surface area of the body that moves through air, air resistance increases and vice versa. (Direct relation)**



## Life applications:

1. **Rockets aircrafts and trains are designed in streamline shape. (G.R)**
   ➲ To decrease air resistance.
2. **Birds have streamline shapes. (G.R)**
   ➲ To decrease air resistance.
3. **Parachutist opens the parachute to land safely. (G.R)**
   ➲ **To** increase air resistance by increasing its surface area and falling speed decreases.
4. **Birds stretch their wings on landing. (G.R)**
   ➲ To increase air resistance by increasing their surface area, where this causes a decrease in their speed on landing.

## 2-Friction between a solid obiect and water.

➲ **When any object moves through water (as fish and ship), a friction force arises between this object and water.**

➲ **This friction force is called "water resistance".**

## Water resistance:

➲ It is a friction force resulting from the movement of any object through Water.

## Note:

➲ The direction of water resistance is in the opposite direction of the movement.

## The factors affecting water resistance:

1-The speed of the body through water.
➲ By increasing the speed of the body through water, water resistance increases and vice versa. (Direct relation)

2-The surface area of the body.
➲ By increasing the surface area of the body that moves through water, water resistance increases and vice versa. (Direct relation)

## Life applications:

1- Fish have streamline shapes.
2- Ships are designed in streamline shapes.

## G.R:

1- The importance of the streamline shape of fish and ships.
➲ To decrease water resistance.

Unit 1 Lesson 2

# Friction Applications

## The advantages of friction:

**Friction force is necessary because:**

- It helps in moving and stopping cars or bicycles.
- It enables us to control the car speed and to change the car direction.
- It enables us to walk as the friction between our shoes and the ground prevents us from slipping down.
- Lighting of a match.

## The disadvantages of friction:

**- Mention the disadvantages of the friction force?**

- The friction increases the temperature of the internal moving parts of machines.
- So machines are damaged.
- And a lot of money is wasted.

## *Give reasons:*

**1- Friction causes damage to most of machines.**

Because it raises the temperature of the internal moving parts of machines so it damaged.

## Ways to decrease the friction

**A) Using lubricants and oil.**

- They form a thin layer between the internal moving parts of machines to decrease the friction force.

**B) Using a ball bearing.**

- \- Technicians put ball bearing between the internal moving parts of machines to decrease the friction force.
- \- It puts in the car axis.
- \- It transmits the motion from the car engine to the wheels.

***Ball bearing***: A set that is formed of a group of small metallic balls which have smooth surfaces.



### *Give reasons:*

- Ball bearings are used between the surfaces of the moving parts in machines.
- Lubricants and oil are used in the mechanical machines.

To decrease the friction force between the internal moving parts of machines.

Class Work Sheet

# Worksheet on lesson 1

**1- Complete the following:**

1- Friction force has its effect on ……………… direction of the object motion.

2- The value of ……………….between two surfaces depends on types of material of both surface.

3- Technicians put …………… between …………… to decrease the friction force.

4- The friction force between two surfaces is ………………. while moving.

**2- Write the scientific term:**

1- The force that slows down the moving object and has its effect in the opposite direction of the objects motion.

2- A set of small balls of smooth surfaces are put together between the internal surfaces of machines.

**3 - Choose the correct answer:**

1-To decrease friction force we use …………

(oil – lubricants- ball bearing – all of them)

2- Which surfaces of the following have the greatest friction force?

(Glass and glass – Rubber and dry cement – Rubber and wet cement – Glass and wet cement)

**4- Give reasons:**

1- Oil and lubricants are used in machines.

……………………………………………………………………………

2- There is a direct relation between the surface area and the friction force.

……………………………………………………………………………

3- Friction force has many disadvantages.

……………………………………………………………………………

4- Ball bearings are used between the moving parts in machines.

……………………………………………………………………………………

**5- Put (√ ) or (X):**

1- The friction force is always in the same direction of the object movement.(   )

2- The friction force depends on the shape of the surfaces of touching objects. (   )

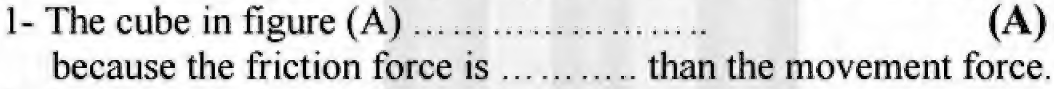
3- Oil is used to decrease the friction force. (   )

**6- Look at the opposite figures, then answer the following :**



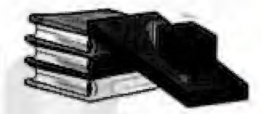
1- The cube in figure (A) …………………….. **(A)**

because the friction force is ……….. than the movement force.



2- The cube in figure (B) ……………………..

because the friction force is ……….. than the movement force. **(B)**



## Home Work Sheet

**Q1. Write the scientific term:**

1. A type of friction force resulting from object movement on air.
( )
2. A type of friction force resulting from object movement in water.
( )

**Q2 Correct the underlined word:**

1. The moving car is affected by air resistance in **the same** direction of its movement.
2. The air resistance decreases when the car moves so **fast**.
3. The relationship between the area of the object surface exposed to the air& the air resistance of its movement is an **inverse relation**.
4. When the parachutist opens his parachute, the friction force **decreases**.
5. When the friction force between the air& a car is equal to the force that moves it, the car moves at a **different** velocity.

**Q3 Give reasons:**

1. The fish has a streamline shape.

……………………………………………………………………………………………………

2. Car drivers should not increase the car speed up to a certain limit.

……………………………………………………………………………………………………

3. Car tires should be replaced when their grooves disappear.

……………………………………………………………………………………………………

4. Ball bearings decrease the friction between machines internal moving parts.

……………………………………………………………………………………………………

5. Rockets, Aircrafts, planes& trains are designed in stream line shapes.

……………………………………………………………………………………………………

6. The parachutist opens his parachute to land safely.

……………………………………………………………………………………………………

**Q4 Complete:**

1. Parachutist opens the parachute to……………………….. The air resistance & then he……………………his falling speed so he can lend safely.
2. The body of the bird has a …………………shape to……………………… the air resistance (friction force)
3. When the ship or fish move so fast in water, the…………………………between this objects& water increases.
4. The friction force has its effect on the………………………direction to the object's movement.

**Q5 Mention the advantages of the friction force:**

1. ----------------------------------------------------------
2. ----------------------------------------------------------
3. ----------------------------------------------------------
4. ----------------------------------------------------------

**Q6 Mention the disadvantages of the friction force.**

1. ----------------------------------------------------------
2. ----------------------------------------------------------

Unit 2

Lesson 1

# The human circulatory system

## Its function:

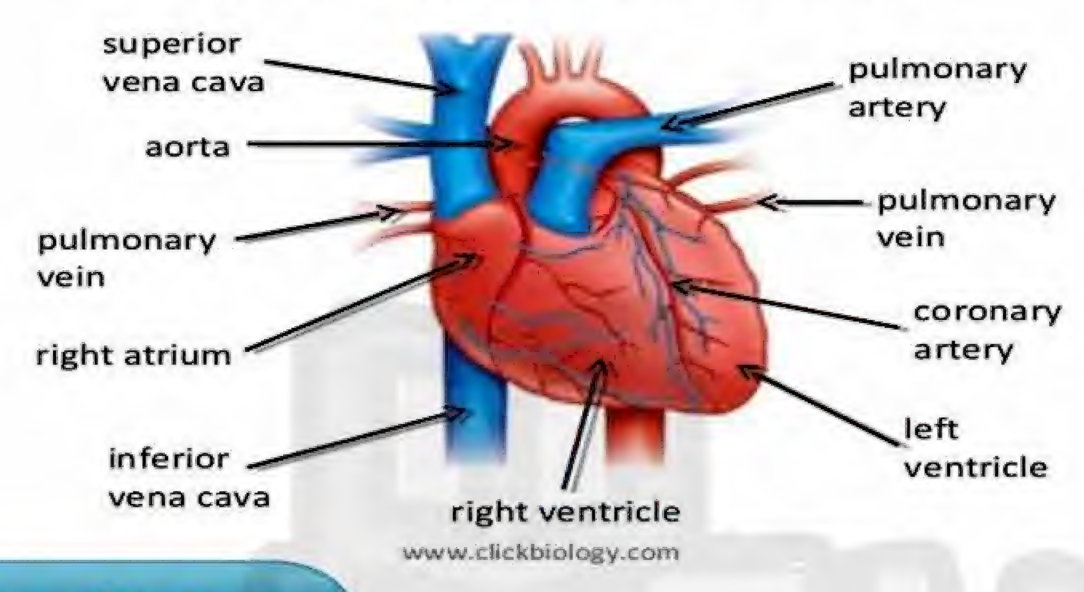
- It transports the digested food, oxygen and water to all the body cells.
- It carries (carbon dioxide gas, water vapour and wastes) away to special organs in your body to get rid of them.
- It helps in maintaining (keeping) the body health.

Circulatory system consists of

- The heart
- The blood
- The blood vessels

## A) The heart:

- It is a strong muscular hollow organ (muscular pump).
- Equals about the size of your fist.
- It is located within (inside) the chest cavity between the two lungs.
- It pumps the blood continuously throughout the body.




## Structure of the heart

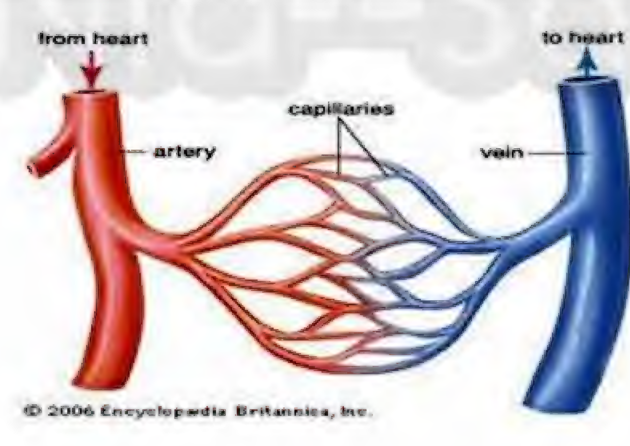
- Heart has 4 chambers (rooms) and 2 sides, the right side and the left side.
- The upper chamber in each side is called atrium.
- The lower chamber in each side is called ventricle.
- There is a wall that separates between the left side and the right side.
- There is a valve between each atrium and ventricle.

## *Give reasons:*

- There is a wall between the left side and the right side.
  (To prevent mixing the blood in both sides.)
- There is a valve between each atrium and ventricle.
  (To allow the blood to pass from the atrium to ventricle, not returning back.)

## *B)* The blood vessels:

| Arteries | Veins | Blood capillaries |
|---|---|---|
| Carry the blood from the heart to all the body parts. | Carry the blood from all the body parts to the heart | Connect the ending of arteries to the beginnings of veins. |
| They are thick blood vessels. | They are thin blood vessels. | Have very thin wall. |
| All arteries carry blood rich in oxygen gas except the pulmonary artery which carries blood rich in carbon dioxide gas. | All veins carry blood rich in carbon dioxide gas except the pulmonary veins which carry blood rich in oxygen gas. | -Network of tiny blood vessels with very thin walls.<br>-Located within the tissues and around the cells. |
| -Emerges from the two ventricles.<br>-Large and wide at the beginning, but become smaller at end. | -Open (enter) in the two atria.<br>-Smaller at the beginning and become larger. | Function: their thin walls allow the blood to deliver food and oxygen to the cells and carries carbon dioxide and wastes. |
| -Aorta.<br>-Pulmonary artery. | -Pulmonary veins.<br>-Superior and inferior vena cava. | |



## C) The blood:

- It is a red liquid.
- Carries digested food and oxygen to all parts of the body and gets rid of the wastes resulting from the breaking down of food.

The blood
- Red blood cells
- White blood cells
- Blood platelets
- Plasma

### A) Red blood cells:

- They are red cells without nuclei.
- Carry oxygen gas from lungs to all the body cells, and carry carbon dioxide gas from the cells to the lungs.

### B) White blood cells:

- They are white cells with nuclei.
- Defend the body against microbes by attacking them.

### C) Blood platelets:

- They are small-sized cells fragments.
- Has a role in coagulation of the blood (forming a blood clot) when the body is wounded.
- When the body is wounded and the blood is exposed to the air, this prevents the bleeding and helps in healing the wounds.

### D) Plasma:

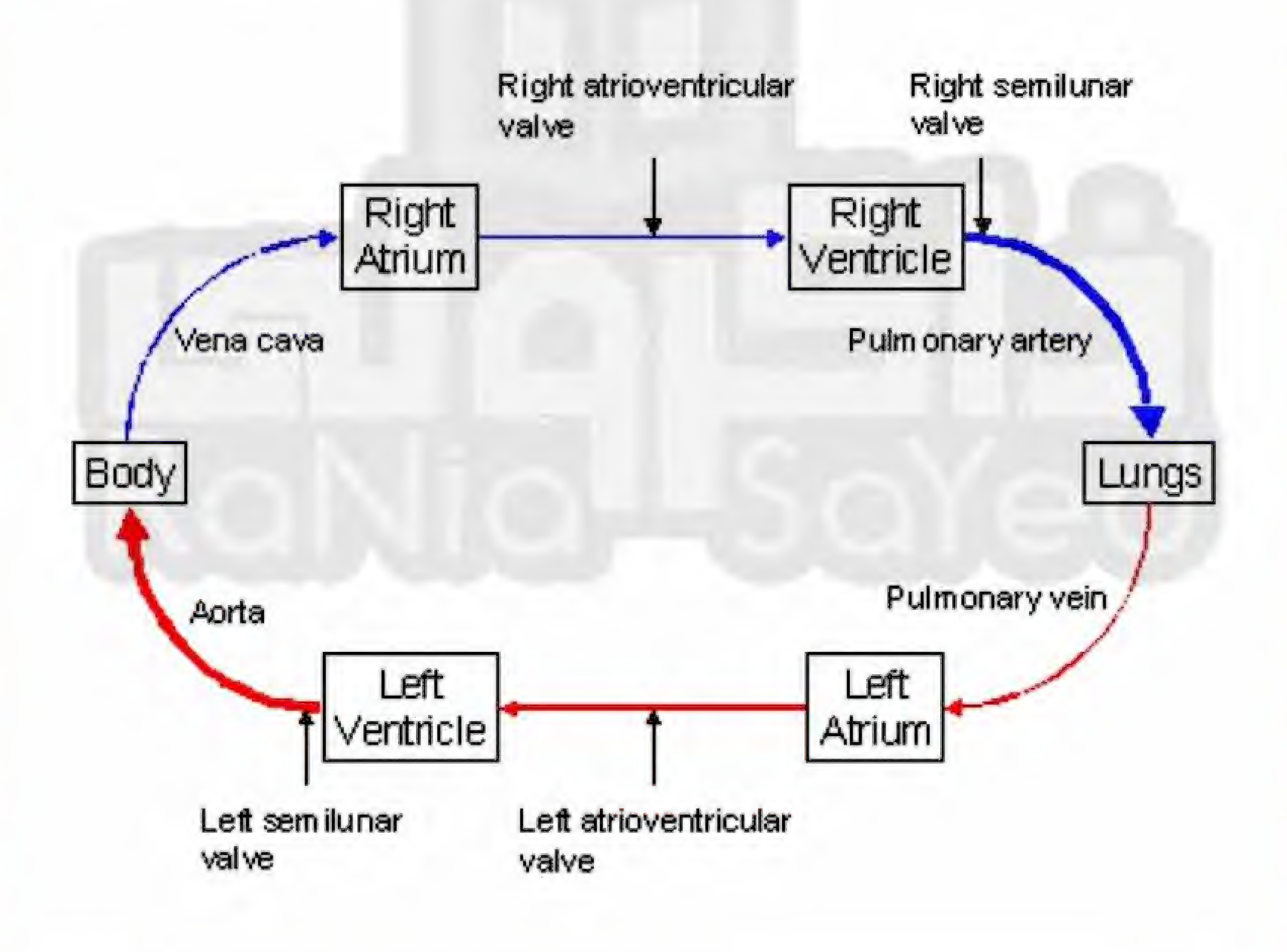
- A yellow watery fluid of the blood that all components are suspended.
- Carries the digested food that cells need.
- Carries the harmful wastes that formed by breaking down of food to get rid of them.

## The general functions of blood:

1) Transfer and deliver the materials to all the body cells.
2) Defend the body against microbes.
3) Keeps the temperature of the body constant.

## Blood circulation:

**Path of blood throughout the body.**



**Notes:**

- The left side of the heart contains blood rich in oxygen gas.
- The right side of the heart contains blood rich in carbon dioxide gas.
- Each atrium receives the blood.
- Each ventricle pumps the blood.

***Give reasons:***

- The wall of the left ventricle is thicker than the right ventricle.
  (Because the left ventricle pumps the blood to all the body cells, while the right ventricle pumps the blood to the two lungs only).

**The blood circulation can be divided into:**

**The minor (pulmonary) Blood circulation**
It is the blood circulation between the heart and the two lungs.

**The major (systemic) Blood circulation**
It is the blood circulation between the heart and all body parts.

## How to maintain the circulatory system?

- Keep exercising to strong the heart and activates the blood circulation.
- Eat healthy and balanced food that is low in fat and salt.
- Eat more fresh fruits and vegetables that rich in iron to avoid anemia disease.
- Drink a suitable amount of clean water.
- Avoid smoking and smokers.
- Avoid exposure to infections and accidents.
- When wounded, try to stop bleeding and get treatment.



## Class Work Sheet

**Complete:-**

1) The circulatory system consists of …………., …………. and…………… .
2) Heart is located within the …………….. cavity between the ……………. .
3) Heart is composed of ………… sides and …………. chambers filled with ……………… and connected with ………………..
4) There is a valve between …………… and ……………of the heart.
5) Blood flows inside a network of pipelines called ………………… .
6) 6- The types of blood vessels are ……………,…………… . and………….
7) The blood vessels that emerge from the heart are called …………
8) The blood vessels which collect the blood from all body organs to the heart called ……………… .
9) The blood is composed of …………….,……………, …………… and………………… .
10) The blood cells which attack the microbes that cause diseases to humans are …………………… .

**2- Write the scientific term:**

I. A muscular organ about the fist size. (……………)
II. The two lower chambers of the heart.(……………)
III. The pipelines that extend all over the human body. (………….)
IV. The artery that carries blood rich in carbon dioxide. (…………)
V. The cells that have no nuclei. ( ………….)
VI. The small bodies that play an important role in the blood coagulation. (……………)
VII. A yellow watery fluid in which blood cells float.(…………..)
VIII. The blood vessels that collect blood from all the body parts to the heart.(……………)
IX. The cells which carry oxygen gas. (……………)

## Home Work Sheet

**3- Give reasons:**

1- Left ventricle has thicker wall than right ventricle.

..........................................................................................................

2- The two sides of the heart are separated.

..........................................................................................................

3- Blood is liquid.

..........................................................................................................

4- Heart contains valves.

..........................................................................................................

5- Blood capillaries have thin walls.

..........................................................................................................

6- Blood platelets are very important.

..........................................................................................................

7- White blood cells keep your body healthy.

..........................................................................................................

8- Smoking must be avoided.

..........................................................................................................

**3- Label the diagram:**

1- ......................................

2- ......................................

3- ......................................

4- ......................................

5- ......................................

6- ......................................

7- ......................................

8- ......................................

9- ......................................

10- ......................................

**5- Mention one function for each of the following:**

**1- Plasma.**

…………………………………………………………………………………………

**2- Blood platelets.**

…………………………………………………………………………………………

**3- Red blood cells.**

…………………………………………………………………………………………

**4- White blood cells.**

…………………………………………………………………………………………

**5- Pulmonary artery.**

…………………………………………………………………………………………

**6- Valve.**

…………………………………………………………………………………………

**7- Wall.**

…………………………………………………………………………………………

**6- In the opposite drawing:-**

1)………………………………

2)………………………………

3)………………………………

Unit 2

Lesson 2

# Excretion and human urinary system

## *Excretion process*

It is the process of getting rid of harmful wastes (Carbon dioxide, Water vapour and urine).

| There are two types of wastes: | |
|---|---|
| 1- Solid wastes. | 2- Excretory materials. |
| They are the indigested food that stored in the large intestine until it passes out of the body. | They are the waste materials that produced inside the body cells and the body must get rid of them. |

*The Excretory materials*

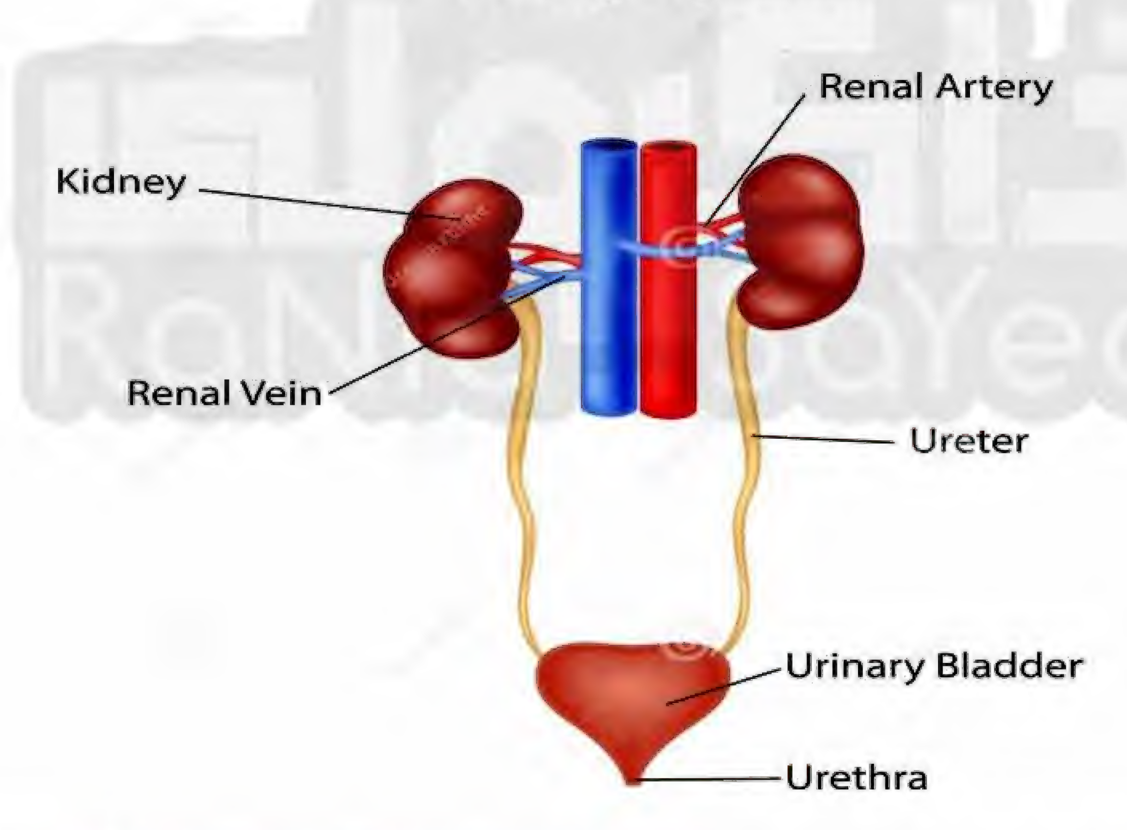
- Carbon dioxide and water vapour
- Nitrogenous wastes such as urea and uric acid
- Excess salts

## Excretory organs

- ➲ Carbon dioxide gas exhaled from the lungs.
- ➲ Excess salts are expelled out in form of sweat from the skin and urinary system.
- ➲ Nitrogenous wastes comes from break down of protein (urea and uric acid) are removed by the ***kidneys*** or ***urinary system***.

## The role of urinary system in excretion process

❖It located in the abdominal cavity near the backbone.
❖It filter the blood from excess salts, urea, uric acid and other waste materials.



| The organs | The function |
|---|---|
| **Two kidneys** | ➲ They are bean-shaped organs.<br>➲ One at each side of backbone.<br>➲ Filter the blood from urea, uric acid, excess salts and other waste materials in the form of urine.<br>➲ Each kidney have 1 million minute tubules top filter the blood. |
| **Two ureters** | ➲ Two narrow tubes that carry urine from the kidneys to the urinary bladder. |
| **Urinary bladder** | ➲ A balloon like a sac that receives urine from the ureters.<br>➲ Stores urine until it is released from the body to the outside through the urethra. |
| **Urethra** | ➲ A tupe extend from urinary bladder and open outside the body to remove the urine. |
| **Vein** | ➲ Transports pure blood which is filtered by the kidneys to the heart. |
| **Artery** | ➲ Carries blood contains wastes to the kidneys. |

## How to maintain the urinary system healthy?

- ➲ Drink a suitable amount of clean water.
- ➲ Eat healthy and balanced food, low in salt.
- ➲ Avoid schistosomiasis disease (bloody urine) by keeping away from canals.
- ➲ Don't keep urine for long periods, because this affects the function of kidney.

## Class Work Sheet

**Complete:-**

1- Kidneys are located on both sides of ………………….. .
2- The kidney excretes the wastes dissolved in water in the form of ……..………….. .
3- ……………. is connected with the kidney and carries the urine into …….. .
4- Lungs help the body to get rid of ……………….. and …………………… .

5- Urine consists of water containing salts,…………,……………… and…………….
6- Sweat consists of ………………….and ………………..
7- The skin helps the body to get rid of ………………………
8- The tube which extends from the bladder and opens outside the body is called ……………………

**2- Write the scientific term:**

1- The group of organs that clarifies the body from the wastes and harmful substances. (……………………………………………)
2- The fluid which the kidneys produces and contains harmful substances. (……………………………………………)
3- The narrow tubes which connects with kidney and urine passes through it. (……………………………………………)
4- The two organs which excrete carbon dioxide gas and water vapour. (……………………………………………)
5- A tube extends from urinary bladder to outside. (……………………………………………)
6- Two narrow tubes connect between kidney and urinary bladder. (……………………………………………)

## Home Work Sheet

**1- Give reasons:**

1- Kidney is an important organ in the urinary system

……………………………………………………………………………

2- We should drink enough water.

……………………………………………………………………………

3- Skin is one of the excretory organs.

……………………………………………………………………………

4- Man urinates less in summer than winter.

……………………………………………………………………………

**2- Mention one function for each of the following:**

1- Two kidneys.

……………………………………………………………………………

2- Two ureters.

……………………………………………………………………………

3- Urinary bladder.

……………………………………………………………………………

4- Urethra.

……………………………………………………………………………

**3- Label the diagram:**

1- ………………………………

2- ………………………………

3- ………………………………

4- ………………………………

(1)
(2)
(3)
(4)

Unit 3

Lesson 1

# Soil Components

## Soil:

➲ It is the thin non compacted layer that covers the earth crust. Soil is made of rocks; it has water, air and humus.

## Importance of soil:

1- Growth of plant, that is important for human and animals.
2- Home for many living organisms.

## Stages of soil formation:

1- Rocks break down into small pieces with time.
2- Wind breaks down the rocks.
3- Water breaks down the rocks into smaller pieces.

## Soil components:

➲ Fill a graduated tube with water and add to it a sample of soil
➲ Soil consists of humus, water, mud, silt and gravel
↓
Clay

Humus
Water
Silt
Particles of clay (mud)
Large particles of sand
Gravel

## Humus:

➲ It is the decayed remains of plants and animals.
➲ It adds nutrient, to soil.

## How is humus formed?

➲ Soil composed of minerals that resulted from breaking down rocks mixed with decayed material of dead organisms.

## How the soil of Egypt is formed?

1- When the rocks of Ethiopian plateau are exposed for millions years to wind – heat rain and running water they broken down into small particles.
2- The flood water carried rocks to River Nile then it deposited.

## Soil and living organisms:

**Soil is composed of three layers which are:**

1. **Top soil layers:**

➲ **Root and animals are in the top layers of soil.**

➲ **Roots of plant, take water and nutrients from the soil.**

➲ **Roots hold the plant in soil.**

➲ **Roots add nutrient to soil.**

**2. Lower layers:**

- ➲ Soil that don't have much humus.

**3. Rocky layers:**

- ➲ They contain rocks.
- ➲ Earth worms and some spiders make their home underground.
- ➲ They dig tunnels in soil allow air, water and nutrients to pass.
- ➲ Tunnels help for growth of plant roots.

***Give reasons.***

- ➲ Animals add nutrients to soil?

(Because: When they die their bodies decay to humus.)

## Class Work Sheet

**Q1 Complete:**

1. The soil contains gravel that produced from breaking down of…………………………………………

2. The main soil components are ……………………… , ……………………. and ………………………………

3. Humus add nutrients to ………………………………

4. Water and……………………… break down rocks into small pieces to form soil.

5. The origin of the agricultural soil of Egypt is the rocks of ……………………………………

**Q2 Choose:**

1. The…………………… is the decayed remains of animals& plants.
**{ Humus – Silt – Sand – Clay}**

2. The origin of the agricultural soil of Egypt is………………………plateau.
**{ Tibet – Golan – Ethiopian – Red sea}**

**Q3 Write the function of:**

1. The roots of the plant:
………………………………………………………………………………………………………………

2. The Earthworm
………………………………………………………………………………………………………………

3-The soil.
………………………………………………………………………………………………………………

## Home Work Sheet

**Q1. Write scientific term:**

1. A thin non- compacted layer that covers the earth crust.

( )

2. The remains of the decayed organisms.

( )

**Q2. Give reason for:**

1. The soil is the main components of the environment.

..................................................................................................................

..................................................................................................................

2. Roots of plants are important for soil.

..................................................................................................................

..................................................................................................................

3. The organisms that live in the soil have a great importance.

..................................................................................................................

..................................................................................................................

Unit 3

Lesson 2

## Types and properties of soil

***Soil can be classified according to their kind into:***

**1- Clay soil:**

It consists of clay and silt mainly and small amount of sand and humus.

**2- Sand soil:**

It consists mainly of sand and small amount of clay. Silt and rarely humus.

**3- Silt soil:**

It composed of a mixture of gravel. Sand clay silt and more humus.

## Soil and plants:

**1- Sand soil:** It is suitable for cultivation plants that produce tubers such as potato and sweet potato - peanut plant gives fruits beneath the soil.

**2- Clay soil:** suits the cultivation of cotton, rice, sugar cane wheat and many vegetable plants.

**3- Silt soil:** strawberry, lemon, pomegranate and orange.

## Comparison between types of soil

| Properties | Sand | Clay | Silt |
|---|---|---|---|
| 1- composition | Sand | Clay and silt | Mixture of gravel – clay sand silt humus |
| 2- color | Yellow | Dark | Grey |
| 3- size of particles | Large | Small | Medium |
| 4- Aeration | Good | Poor | Medium |
| 5- compactness | Weak | Hard | Medium |
| 6- water absorption | Low | High | Medium |
| 7- drainage of water | Fast | Slow | Medium |
| 8- Holding of water | Less | More | Medium |
| 9- fertility | Less fertile | Fertile | Highly fertile |



## Class Work Sheet

**Q1. Complete:**

1. The main types of soil are ---------------, -------------- and ------------
2. The colour of ------------------- soil is dark, while that of --------------- soil is yellow.
3. The compactness in -------------------- soil is very weak, while that in ----------------- soil is very high.
4. The ----------------- soil is highly fertile, because it contains a large amount of ---------------------
5. Clay soil keeps (retains) --------------------- water, while ---------------------- soil keeps less water.
6. Silt soil aeration is -------------------, while clay soil compactness is -------------- and silt soil fertility is-------------------------------------
7. Cactus grows in ------------------ soil, while cotton grows in ----------------------------- soil.

**Q2. Choose:**

1. The size of particles of clay soil is ------------------

**{Large – small – medium – none of them}**

2. The particles of silt soil are ------------ ---- in size.

**{Tiny – medium – large – very large }**

3. The silt soil compactness is --------------------

**{Strong – weak – medium - very strong}**

4. The aeration of sand soil is ---------------------

**{Good – bad – medium – poor}**

5. The sand soil ------------------ water more than the other two types of soil.

**{Drains – retains – keeps – none of them}**

6. The most suitable soil for cultivation is the -------

**{Sand soil – clay soil – silt soil – gravel soil}**

7. Strawberry& Oranges grow in ----------------- soil.

**{Sand – clay – silt – clay& sand}**

**Q3. Write the type of plant which is cultivated in:**

1. Sand soil:
……………………………………………………………………………………………
2. Clay soil:
……………………………………………………………………………………………
3. Silt soil.
……………………………………………………………………………………………

## Home Work Sheet

**Q1. Write scientific term:**

1. The well aerated soil. (                    )
2. The highly fertile soil that contains suitable dissolved salts& humus. (                    )
3. The soil which is dark& has small sized- particles. (                    )

**Q2. Give reason for:**

1. The water level in clay soil is higher than the water level in both sand& silt soil.

……………………………………………………………………………………………
……………………………………………………………………………………………

2. The clay soil is poorly aerated.

……………………………………………………………………………………………
……………………………………………………………………………………………

3. The silt soil is highly fertile.

……………………………………………………………………………………………
……………………………………………………………………………………………

**Q3. Correct the underlined:**

1. The **sand soil** is strongly compacted, poorly aerated and fertile.
2. The **silt soil** is poorly aerated.
3. Cactus plant grows in the **clay soil**.
4. Sweet potatoes grow in **silt soil**.
5. The clay soil is **yellow** in color.

## PRACTICAL SHEET

### FIRST QUESTION

**Write the missing labels of the following figure**

**Figure (1):**

1) Right atrium.

2) Valve.

3) Right ventricle.

4) Left ventricle.

5) Left atrium.

**Figure (2):**

1) Kidney.
2) Ureter.
3) Urinary bladder.
4) Urethra.

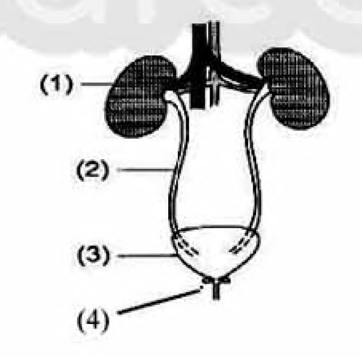


**Figure (3):**

1) Humus.
2) Water.
3) Mud.
4) Silt.
5) Sand.
6) Gravel.

(1)
(2)
(3)
(4)
(5)
(6)

**SECOND QUESTION**

**Write the name of soil and the suitable plant grown:**

1) **Sand soil:** It is suitable for cultivation plants such as potato and sweet potato - peanut.



Sand

**2) Clay soil:** suits the cultivation of cotton, rice, sugar cane wheat plant.


Clay

**3) Silt soil:** strawberry, lemon, pomegranate and orange.


Silt

